

BARNOLDSWICK

URBAN DISTRICT COUNCIL.

Annual Report of the Medical Officer of Health for the Year 1901.

Area 2,129 acres ; Rateable Value (1901), £17,288 ; Inhabited Houses (1871), 638 ; (1881), 820 ; (1891), 887 ; (1901), 1418. Population enumerated (1871) 3,187 ; (1881) 4028 ; (1891) 4131 ; (1901) 6,382.

SANITARY CONDITION AND PROGRESS : WATER SUPPLY.—Barnoldswick has an excellent supply of good pure water. After considering various schemes, it was decided to adopt a pumping one. Dry Laithe was purchased and a 10ft. well sunk 100ft. deep, then a bore hole 13in. diameter, 170ft. from the bottom of the well. The yield of water proved insufficient, and on the advice of Mr. De Rance, the bore hole was carried a further 200ft. The machinery consists of two engines with three pumps, which can run conjointly or separately as required. The drought of the past summer has most thoroughly tested the efficiency of the supply and well has the test been stood ; while all the neighbouring towns and villages were pinched and the supply curtailed almost to famine point, Barnoldswick was fully supplied with good wholesome water, the only restriction which was imposed being on swilling. The average consumption has been 13·6 gallons per head. There is a reserve of about one-fifth more which is not so much in the face of the highly probable increase of the town's population ; the council will be wise to keep in mind that it will not be long before they must make further provision. The reservoir was cleaned out in August, and to prevent the service of the town being stopped during that time a 9in. valve has been fixed between service and rising mains to the reservoir. The mains have been flushed at regular intervals. The only new main laid during the year is a 3in. one, 86 yards long in Butts Paddock. Twenty-nine houses have been supplied with water.

SEWAGE AND DRAINAGE.—Barnoldswick has a fairly complete system of drainage. The sewage is first treated by precipitation and passed over polarite filter beds, then subjected to land filtration at Reed Ing, which is situated about a mile from the town. The effluent has been carefully watched and every effort has been made to keep it up to the standard required by the Rivers Pollution Commissioners.

The council have made another large sludge bed. The only extension of main sewers this year has been 250 yards of 15in. pipes with the necessary man and lamp holes, in Skipton Road. In 1900, on my recommendation, the council undertook the scavenging work themselves, it having been previously let by contract. Since then there has been a great improvement and the complaints far less numerous. About thirty ashpits have been covered in and made water-tight. There are a great many still open and the council ought to press on with the work they have begun. The closet system in use in the town is either Duckett's Patent Slop Water Tippler or pails. There are far too many of the latter—376, and in most instances the closets could be connected with the main sewer. About a dozen tanks still remain, the council ought to insist on them being converted at once.

PUBLIC STREETS IMPROVEMENTS.—At the end of last year the council had just come to an arrangement with the Midland Railway Co. for the widening of Skipton Road. That work has been completed and a new 15in. top water drain, 250 yards, with the necessary gullies put in. If it be possible the council might still further greatly improve the approach to the town by a similar arrangement with the owners on the opposite side of the road. The town end of Colne Road has also been remodelled and thoroughly repaired.

PRIVATE STREETS WORKS ACT, 1892.—On Nov. 7th, 1901, W. A. Ducat, Esq. held an enquiry respecting a loan of £3,250 to be applied to Private Street Improvements. Sanction has been received, and the work of paving, channelling and kerbing, etc., of the following streets is now in progress, viz.:—York Street, Wellington Street, Beech Street and Chapel Street.

INFECTIOUS DISEASES HOSPITAL.—Sanction for a loan of £3,500 was granted for the purpose of erecting a small Hospital in November, 1898. Plans were made and contracts for the same were let in August, 1899, the work dragged slowly on all through 1900-1, and at last the buildings are finished with the exception of completing the furnishing, which will be done by the end of the present month, February. A Thresh's disinfecter has been fixed at a cost of £135. There is a certain amount of prejudice against allowing children to go to the hospital in this district, but that will wear away as people come to see the benefit.

BYE-LAWS, &c.—The council adopted the model bye-laws, with certain modifications, with respect to "New Streets and Buildings," "Slaughter Houses," "Common Lodging Houses," and "Nuisances," and these were sanctioned by the Local Government Board, August 25th, 1891. It has also adopted a form of regulations under the "Dairies, Cow-sheds, and Milk-shops Order, 1886," and these were sealed August 5th, 1891. Bye-Laws relating to offensive trades have been adopted, and received sanction on August 30th, 1901.

ACTS OF PARLIAMENT ADOPTED.—"The 'Infectious Diseases (Notification) Act, 1889," and the "Infectious Diseases (Prevention) Act, 1890," were adopted in April and came into force on May 21st, 1895. Parts III and IV of the "Public Health Acts (Amendment Act, 1890)," were adopted; Part IV came into operation on September 4th, 1895, and Part III on January 13th, 1896. The "Private Streets Works Act, 1892," was adopted October 23rd, and came into force on November 25th, 1895.

POPULATION.—At the 1871 census the population was 3,787; at the 1881 it was 4,028; at the 1891, 4,131; and at the 1901 it was 6,382; living in 1,418 houses, or an average of 4.5 per house; the calculation having been made at 5 per house, caused one to rather over-estimate the number of inhabitants. Only twenty-nine new houses have been built during the year.

BIRTHS —The total births registered during the year were 192 (105 males and 87 females), being equivalent to an annual birth-rate of 30·0 per 1,000 population, as compared with 27·5 last year and 24·7 in 1899.

DEATHS.—The total deaths returned were 99 (46 males and 53 females), equivalent to an annual mortality of 15·5 per living thousand, as compared with 13·4 last year and 15·5 in 1899.

The deaths were distributed among the four quarters of the year as follows :—

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
1891	9	23	13	18
1892	22	20	12	21
1893	19	11	17	27
1894	21	22	10	18
1895	18	25	16	40
1896	22	21	16	21
1897	25	34	14	18
1898	20	19	24	32
1899	24	28	21	32
1900	25	32	21	17
1901	25	23	21	30

MORTALITY AS TO AGE :—

Deaths under 1 year of age	35	} Under 5 years
„ over 1 „ and under 5 years of age	...	...	...	18
„ „ 5 „ „ 15 „	4	} Over 5 years.
„ „ 15 „ „ 25 „	...	...	...	4
„ „ 25 „ „ 60 „	...	...	...	16
„ „ 60 „ „ ... „	...	...	...	22
Total Deaths				99	

Comparing these rates with those of England and Wales, Barnoldswick stands pretty well except with regard to the infant mortality :—

	England & Wales.	Barnoldswick.
Birth Rate	28·5	30·0
Death Rate	16·9	15·5
Zymotic Rate	2·05	2·03
Infant Mortality (per 1,000 Births)	151	182·2

TABLE A.

The following table shows the population, inhabited houses, births and deaths for the ten years 1891-1900 inclusive, also the average of the decades 1881-1890 and 1891-1900.

Year.	Population	Inhabited Houses	Births	Deaths
Average for 10 yrs. 1881-90	4072		141	77
1891	Census 4131	877	151	64
1892	4140	900	141	76
1893	4150	1000	129	76
1894	4160	1035	132	76
1895	4300	1090	183	101
1896	5500	1195	161	80
1897	5550	1230	177	94
1898	6725	1345	215	97
1899	6800	1360	168	106
1900	7070	1414	195	95
Aver. for 10 yrs. 1891-1900	5252	1144	155	86
1901	6382	1418	192	99

TABLE B.

This table shows the birth rate, rates of mortality and death rates among the children during the years 1891 to 1901, also the average of the decade 1881-90 and 1891-1900.

Year	Birth-rate per 1,000 of the population	Annual rate of mortality per 1,000 living	Deaths of Children un- der 1 year ; percentage of total deaths	Percentage of deaths of Children un- der 1 year to registered births	Deaths of Children un- der 5 years ; percentage of total deaths.
Average for 10 yrs. 1881-90	34.7	18.5	26.7	14.9	41.3
1891	36.5	15.4	21.8	9.2	31.2
1892	34.0	18.3	21.0	11.3	31.5
1893	31.0	18.3	21.0	12.4	31.5
1894	31.7	18.2	28.9	16.6	38.1
1895	42.5	23.4	35.6	19.7	42.5
1896	29.2	14.5	27.4	13.6	38.7
1897	31.8	16.9	37.2	19.7	44.6
1898	31.9	14.4	43.2	19.5	59.7
1899	24.7	15.5	28.3	17.8	40.5
1900	27.5	13.4	34.7	16.9	45.2
Average for 10 yrs. 1891 to 1900	32.0	16.8	29.9	15.6	40.3
1901	30.0	15.5	35.3	18.2	53.5

It will be noted that the infant mortality is still high, but about the average one gets in the districts where the mothers work at the factories. Without doubt, bad feeding plays a very important part in the high death rate. The Yorkshire College gives a number of lectures on useful subjects, I think they might with advantage add a short course on the Rearing and Management of Infants, which would be greatly appreciated.

TABLE C.

Table showing the mortality from certain classes of diseases, and proportions to populations and to 1,000 deaths in the years 1899, 1900 and 1901.

	Total Deaths			Deaths per 1,000 of population			Proportion of Deaths to 1,000 Deaths.		
	1899	1900	1901	1899	1900	1901	1899	1900	1901
1. Seven principal Zymotic Diseases	16	11	13	2·3	1·5	2·0	152	115	131
2. Pulmonary Diseases (other than Phthisis)	23	32	17	3·3	4·5	2·6	219	336	171
3. Tubercular Diseases ...	8	6	9	1·1	·08	1·4	76·1	63·1	90·9
4. Wasting Diseases of Infants	6	11	8	0·8	1·5	1·2	147	115	80·8
5. Convulsive Diseases of Infants	4	4	8	0·5	0·5	1·2	38·0	42·1	80·8

NOTES.

- 1.—Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever and Diarrhœa.
- 3.—Includes Phthisis, Scrofula, Rickets and Tabes.
- 4.—Includes Marasmus, Atrophy, Debility, Want of Breast Milk, and Premature Birth.
- 5.—Includes Hydrocephalus, Infantile Meningitis, Convulsions and Teething.

TABLE D.

This table shows number of deaths certified by registered medical practitioners, uncertified deaths and inquests, with their percentage to total deaths during 1899, 1900 and 1901.

	Deaths			Percentage of Total Deaths		
	1899	1900	1901	1899	1900	1901
Certified	98	93	93	93·3	97·8	94·9
Uncertified	6	2	5	5·7	2·1	5·05
Inquests	1	1	1	0·9	1·05	1·01

The uncertified deaths were returned as been due to apoplexy (1), convulsions (1), epidemic diarrhœa (1), and premature birth (2).

TABLE E.

This table shews the number of deaths from the seven principal zymotic diseases in the three years, 1899, 1900 and 1901.

Disease	Total Deaths			Proportion of deaths to 1,000 deaths.		
	1899	1900	1901	1899	1900	1901
Smallpox .....	...	...	...	...	...	...
Measles	4	...	...	38·0	..	..
Scarlet Fever	1	1	3	9·5	10·5	30·3
Diphtheria	1	...	1	9·5	...	10·1
Membranous Croup ...	1	3	1	9·5	31·5	10·1
Whooping Cough	7	4	...	66·6	42·1	...
Fever .....	...	...	...	...	...	...
Diarrhœa	2	3	8	19·0	31·5	80·8
Totals	16	11	13	152	115	141

Thirteen deaths were returned under the head zymotic diseases, as compared with eleven last year and sixteen in 1899, more than half being due to diarrhœa. This is equivalent to a zymotic death rate of 2·03 per living 1,000.

Eighty-seven certificates have been received during the year under the Infectious Diseases (Notification) Act, 1889, as compared with twenty-nine last year.

SCARLET FEVER.—There have been two distinct outbreaks during the year, the first, when there were fourteen cases, being in February, and was traced to the Church school. The schools were closed and thoroughly cleansed and disinfected, no more cases occurring till the break of the drought in September, when there was a general outbreak all over the town, adults as well as children being attacked. The schools were again closed and disinfected, bills were posted in the town with instructions, etc., also a strongly-worded warning notice about concealment, as the council had reason to believe it was owing to the concealment of the early cases that the disease spread. I would specially draw the attention of the council to the usefulness of isolation at the hospital, especially at the commencement of an epidemic. It is to be hoped that now the building is finished they will do all in their power to encourage the use of it. Three deaths occurred from scarlet fever, one in Chapel Street aged 30 years, one in Smith Street and one in Orchard Street, aged 2 and 4 years respectively. On the whole the disease was of a mild type and attended by very few complications.

DIPHThERIA.—Two cases of this disease were notified, one a child 2 years, the other aged 5 years which died. There was no clue to the origin of the cases, both houses were well drained and the sanitary arrangements satisfactory.

MEMBRANEOUS CROUP.—One death was reported from this disease in a child under two.

DIARRHŒA.—This disease was very prevalent during the later summer months. Eight deaths were attributed to it, five of which occurred in children under one year of age.

ERYSIPELAS.—Eight cases were notified, one terminated fatally in a child under one year.

ENTERIC FEVER.—Only one case of this disease was reported during the year. It occurred at an isolated farmhouse and was traced to the water supply becoming contaminated. The spring was protected from the cattle and there were no further cases.

INFLUENZA.—This disease was epidemic here in the latter part of March and during April. For the most part it was of a mild type ; no deaths were attributed to it or its complications.

SLAUGHTER-HOUSES.—The six slaughter-houses are duly registered, and have been regularly inspected. The removal of the refuse has been carried out better than last year, still there is room for great improvement. The whitewashing required by bye-law 12, has been properly attended to. The cow sheds and dairies are registered and have been inspected. In December the fore-quarters of a beast with tuberculosis were seized and condemned as unfit for human food.

NOXIOUS TRADES.—There are two tripe boilers in the town ; their premises are kept in order.

COMMON LODGING-HOUSES.—None in the town.

SMOKE ABATEMENT.—Observations have been taken at intervals. On the whole, with one exception, the results have been fairly satisfactory.

RECREATION GROUND.—The council applied for leave to borrow £1600 for the purpose of purchasing and laying out of a recreation ground. J. A. Hepper, Esq. held an enquiry into the matter on February 6th. It was strongly opposed by a large body of ratepayers, however, sanction for the loan was granted. Land has been purchased for £1,300, and contract for making the road to it let at £250.

METEOROLOGICAL RETURNS.—Appended is the table of the rainfall for the district during the year 1901. It is interesting to note the total fall this year was 32.209 inches as compared with 44.145 inches last year, and the number of wet days was 195 as compared with 229.

<p>RAINFALL IN 1901.</p> <p>At Marton House, nr. Barnoldswick, in the County of York.</p> <p>RAIN GAUGE :</p> <p>Diameter of Funnel, 5 inches.</p> <p>Height of Top { Above Ground, 10 inches Above Sea Level, 565 feet</p>				
Month	Total Depth	Greatest fall in 24 hours.		Number of Days on which 101 or more fell.
	Inches	Depth	Date	
Jan . .	2.649	.743	26th	23
Feb . .	1.158	.359	28th	19
March	3.437	.937	29th	20
April...	2.481	.522	29th	18
May ...	1.277	.554	29th	8
June ..	1.235	.363	20th	12
July ...	2.291	1.134	27th	10
Aug	2.230	.572	14th	16
Sept ...	1.218	.330	30th	14
Oct ...	2.688	.630	8th	20
Nov ...	5.851	1.645	12th	12
Dec ..	5.694	1.000	7th	23
Total	32.209			195

I have to thank W. Farrer, Esq., of Marton House, for the above information.

TABLE F.

INSPECTOR'S REPORT OF THE SANITARY WORK, &c., completed in the year ending December 31st, 1901.

Number of complaints received	35
Number of houses built during the year	29
Number of houses, premises, etc., inspected	87
House drains repaired, cleansed, &c.	5
Privies and water closets repaired	10
Water closets provided.....	10
Slop water closets provided.....	35
Pails closets provided	2
Privies provided.....	1
Water supply, houses provided with.....	29
Ashpits, new, provided.....	32
Ditto. repaired and covered.....	30
Ashpits ordered to be emptied.....	13
Removal of accumulation of dung, stagnant water, animal or other refuse	6
Seizure of unsound meat, etc.....	1
Prosecutions taken under ditto	nil
Smoke records taken.....	10
Total number of summons or other legal proceedings ..	nil
Houses disinfected after infectious diseases	36
Common lodging-houses inspected.....	nil
Slaughter-houses do	6
Dairies and cow-sheds do	35
Milk shops do	1
Premises examined under "Factory and Workshop Act"...	2
Plans approved	19
Plans disapproved.....	8
Total nuisances reported during the year.....	98
Ditto. abated during the year.....	95

WILLIAM BENNETT, *Inspector of Nuisances.*

MATTERS REQUIRING THE COUNCIL'S ATTENTION :—

- 1.—The covering-in of all open ash pits.
- 2.—The conversion of the remaining privy tanks.
- 3.—The Bancrofts & Gillions sewerage.

H. C. ALDERTON, L.R.C.P. (London), M.R.C.S.,

To the Barnoldswick

Medical Officer of Health, Barnoldswick.

Urban Council, February 1902.

TABLE I.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1901 AND PREVIOUS YEARS.

Year	Popu- lation esti- mated to middle of each year	Births		Total Deaths Registered in the District.				Total deaths in public institu- tions in the dis- trict	Deaths of non- resid- nts regis- tered in public institu- tions in the district	Deaths of resid- nts regis- tered in public institu- tions beyond the district	Nett Deaths at all ages belonging to the district.	
		No.	Rate*	Under 1 year of age		At all Ages					No.	Rate*
				No.	Rate per 1000 births regis- tered	No.	Rate*					
1	2	3	4	5	6	7	8	9	10	11	12	13
1891	Census 4131	151	36.5	14	92.7	64	10.6	1				
1892	4140	141	34.0	16	113.4	76	18.3	1				
1893	4150	129	31.0	16	124.0	76	18.3	2				
1894	4160	132	31.7	22	166.6	76	18.2	5				
1895	4300	183	42.5	36	141.5	101	23.4	2	No record			
1896	5500	161	29.2	22	136.6	80	14.5	0				
1897	5550	177	31.8	35	197.7	94	16.9	3				
1898	6725	215	31.9	42	190.6	97	14.4	2				
1899	6800	168	24.7	30	178.5	106	15.5	1				
1900	7070	195	27.5	35	179.4	95	13.4	2	0	3	98	13.8
Averages for years 1891-1900	5252	165	32.0	26	152.1	76	16.3	1.9	...	...	...	...
1901	Census 6382	192	30.0	35	182.2	99	15.5	0	0	0	99	15.5

*Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

NOTE.—The deaths to be included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought in the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The 'Public institutions' to be taken into account for the purposes of these tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums. A list of the institutions in respect of the deaths in which corrections have been made should be given on the back of this table.

Area of District in acres (exclusive of
area covered by water, ...) 2129

Total population at all ages 6382
Number of inhabited houses 1418
Av. No. of persons per house 4.5 } At Census of 1901.

I. Institutions within the District receiving sick and infirm persons from outside the District.	II. Institutions outside the District receiving sick and infirm persons from the district	III. Other Institutions, the deaths in which have been distributed among the several localities in the district.
None	The Workhouse, Skipton Victoria Hospital, Burnley	Menston Asylum.

TABLE III.

Barnoldswick Urban District.

Cases of Infectious Disease notified during the Year 1901.

Notifiable Disease.	Cases notified in Whole District.						
	At all Ages	At Ages†—Years.					
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwds
Small-pox	...						
Cholera	...						
Diphtheria	... 2		2				
Membranous croup	.. 1	1					
Erysipelas	... 8	1			1	5	1
Scarlet fever	... 75	3	24	37	8	3	
Typhus fever	...						
Enteric fever	.. 1			1			
Relapsing fever	..						
Continued fever	...						
Puerperal fever	...						
Plague	...						
*							
Totals	... 87	5	26	38	9	8	1

No cases removed to the hospital.

NOTES.—The localities adopted for this table should be the same as those on Tables II and IV.

State in space below the name of the isolation hospital, if any, to which residents in the district, suffering from infectious disease, are usually sent. Mark (H) the locality in which it is situated, or if not within the district, stated where it is situated, and in what district.

*This space may be used for record of other disease the notification (compulsory or voluntary) of which is in force in the district

†These age columns for notifications should be filled up in all cases where the Medical Officer of Health, by inquiry or otherwise, has obtained the necessary information.

ISOLATION HOSPITAL, BARNOLDSWICK

TABLE IV.

Barnoldswick Urban District.

Causes of, and Ages at, Death during Year 1901.

Causes of Death			Deaths in Whole Districts at Subjoined Ages							Total Deaths in Public Institutions in the District
			All Ages	Under 1 yr.	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	
Small-pox	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...
Scarlet fever	...	...	3	...	2	...	...	1	...	...
Whooping cough	...	...	..	...	...	...	...	...	...	...
Diphtheria and membranous croup	...	...	2	1	1	...	...	...	...	...
Croup	...	...	8	...	6	2	...	...	...	...
Fever {Typhus	...	...	...	...	...	...	...	...	...	...
Enteric	...	...	...	...	...	...	...	...	...	...
{Other continued	...	...	...	...	...	...	...	...	...	...
Epidemic influenza	...	...	..	...	...	...	...	...	...	..
Cholera	...	...	...	...	...	...	...	...	...	...
Plague	...	...	..	...	...	...	...	...	...	...
Diarrhœa (See notes page 15)	...	...	8	5	2	...	...	1	...	...
Enteritis (See notes page 15)	...	...	...	...	...	...	...	...	...	...
Puerperal fever	...	...	...	...	...	...	...	...	...	...
Erysipelas	...	...	1	1	..	...	...	...	...	...
Other septic diseases	...	...	...	...	...	...	...	...	...	...
Phthisis	...	...	1	...	...	...	1	...	...	...
Other tubercular diseases	...	...	7	3	3	...	1	...	...	...
Cancer, malignant disease	...	...	3	...	...	...	...	1	2	...
Bronchitis	...	...	12	3	1	...	...	4	4	...
Pneumonia	...	...	4	..	2	1	...	1	...	...
Pleurisy	...	...	1	..	...	...	...	...	1	...
Other diseases of respiratory organs	...	...	1	...	...	1	...	...	...	...
Alcoholism } Cirrhosis of liver }	...	...	...	...	...	...	...	...	...	...
Venereal diseases	...	...	...	...	...	...	...	...	...	..
Premature birth	...	...	5	5	...	...	...	...	...	...
Diseases and accidents of part-uration	...	...	3	1	...	...	1	1	...	...
Heart diseases	...	...	9	2	...	...	1	3	3	...
Accidents	...	...	...	...	...	...	...	...	...	...
Suicides	...	...	1	..	...	...	...	...	...	...
All other causes	...	...	30	14	1	0	0	4	12	0
All causes	...	...	99	35	18	4	4	16	22	0

See Notes on Page 15.

NOTES. —(a) In this table all deaths of 'Residents' occurring in public institutions, whether within or without the district, are to be included with the other deaths in the columns for the several age groups (columns 2-8). There are also, in columns 9-15, to be included among the deaths in their respective 'Localities' according to the previous addresses of the deceased as given by the registrars. Deaths of 'Non-residents' occurring in public institutions in the district are in like manner to be excluded from 2-8 and 9-15 of this table.

(b) See notes on Table I as to meaning of 'Residents' and 'Non-residents' and as to the 'Public Institutions' to be taken into account for the purposes of these tables. The 'Localities' should be the same as those in Tables II and III.

(c) All deaths occurring in public institutions situated within the district, whether of 'Residents' or of 'Non-residents,' are, in addition to being dealt with as in note (a), to be entered in the last column of this Table. The total number in this column should equal the figures for the year in column 9, Table I.

(d) The total deaths in the several 'Localities' in columns 9-15 of this Table should equal those for the year in the same localities in Table II sub-columns c. The total deaths at all ages in column 2 of this table should equal the gross total of columns 9-15, and the figures for the year in column 12 of Table I.

(e) Under the heading of 'Diarrhœa' are to be included deaths certified as from diarrhœa, alone or in combination with some other cause of ill-defined nature ; and also deaths certified as from

Epidemic enteritis ;
Zymotic enteritis ;
Epidemic diarrhœa. Summer diarrhœa ;
Dysentery and dysenteric diarrhœa ;
Choleraic diarrhœa, cholera, cholera nostras
(in the absence of Asiatic cholera).

Under the heading of 'Enteritis' are to be included those certified as from Gastro-enteritis, Muco-enteritis, and Gastic catarrh, unless from information obtained by enquiry from the certifying practitioner or otherwise, the Medical Officer of Health should have reason for including such deaths, especially those of infants, under the specific term 'Diarrhœa.'

Deaths from diarrhœa secondary to some other well-defined disease should be included under the latter.

In recording the facts under the various headings of Tables I, II, III and IV, attention has been given to the notes on the Tables.

Feby. 28th, 1902.

H. C. ALDERTON, *Medical Officer of Health.*

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ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR

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